Summary Respira evaluation results (2014-2016)

Program evaluation design

The implementation of the program RESPIRA was accompanied by a comprehensive and rigorous evaluation initiated in 2015 and continued during 2016, to demonstrate the changes and transformations generated by the program as well as aspects about the implementation process.

Two types of evaluations were applied in 2015: a) an impact evaluation to identify if the program objectives were met and b) a process evaluation to identify the quality and fidelity of the implementation itself[1].

a. Impact Evaluation

The impact evaluation was designed by education academics and experts from the CIFE[2] of the University Los Andes. It is an experimental desig, with control group and questionnaires for students and teachers. The questionnaires were and will be applied in three moments: 1) before program implementation (base line- 2015), 2) at the end of the first year of implementation (post-test measure 1- end 2015), and 3) at the end of the second year of implementation (post-test measure 2- end 2016).

The tools measure participants' physiological, cognitive, emotional, behavioral and contextual dimensions in teachers and students, according to the program theory of change. Some variables are measured through self reporting, others with teachers who assess students and students who evaluate teachers. There is a total of six questionnaires.

The assessment variables are:

Dimension	Variable
Behavioural	Empathy, active listening, aggression and interpersonal dimensions
Cognitive	Attention and concentration
Psychological	General health
Emotional	Perception of stress, burn out, depression and anxiety symptoms and emotional regulation
Context	Effective classroom management and democratic learning

[1] These two evaluations will still be applied in 2016.

[2] Research and training center on education or Centro de Investigaciones y de Formación en Educación.

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Sample

Fifteen schools from Tambo, Tumaco, Bogotá and Cali [3] participated in the evaluation process: eight schools as part of the experimental group that initiate implementation in the year 2015 and seven as part of the control group. The control group demonstrated similar levels of motivation towards the program, as well as similar socio-demographic characteristics as the schools of the experimental group.

A total of 161 teachers (78 of the control group and 78 of the experimental group) and 5.460 students (2.730 of the control group and 2.730 of the experimental group) participate in the evaluation.

b. Process Evaluation

A process evaluation seeks to monitor the program implementation at the levels of: program fidelity, coherence, relevance and satisfaction. The results of this evaluation helped to strengthen the implementation of the program and make adjustments, as well as gather additional information for the analysis of the impact evaluation. The data collection began in the third week of July until the second week of August 2015, and a second round from the second to the fourth week of October 2015. This evaluation process will continue throughout 2016.

The methodology is based on observation of classroom sessions as well as teacher's training sessions, focus groups with teachers and students and satisfaction surveys.

1. Preliminary Impact evaluation results

The analysis results for teachers demonstrated a significant difference between experimental and control groups in two variables: a) aggressive reaction and b) anger regulation. This means that teachers who participated in Respira reacted less aggressively towards others (colleges, students, family etc.) when feeling mistreated and are also better able to regulate their anger and respond more effectively towards negative stimulus.

Also for students, the program had major effects in emotional (anger) and behavioral (aggression) regulation.

The results analysis for teachers' report on their students (grades 1 and 3) demonstrated a significant difference between experimental and control groups in four variables: a) anger regulation b) aggressive reaction c) attention and d) depression symptoms. This means that teachers

[3] These schools receive the Respira program but are not part of Vive la Educación, they are financed by the partner Convivencia Productiva.

perceived that their students responded with less anger and aggression towards negative stimulus, looked less worried and sad and increased their attention in class.

As for self-reporting of 4th and 5th grade students, there were significant findings in: a) active listening, b) depression and anxiety. Students report felling less sad and anxious and improved their communication skills through better listening.

2. Process evaluation results

Teachers report that the RESPIRA program has given them multiple tools on a personal level and as teachers, helping them to reduce stress levels, control and manage their emotions and impulses, and feel more connected with their bodily sensations. This has promoted greater assertiveness, active listening and tolerance in relationships (work environments and in the classroom).

Additionally, teachers report that Respira has given them tools for better classroom management and discipline control; this is reflected in better concentration and attention of students.

Students mentioned that Respira teaches them to breathe and understand their emotions, also to concentrate more in classroom and when doing homework. Fifth grade students reported that teachers have calmed down and do not scold them as often.

The activity with the bottle had a high impact in students since they could visually understand and explain mindfulness (anger-breathe and calm down). Some students mentioned bringing the activity home to be used with their parents.

In relation to the level of satisfaction, relevance and coherence of the program, teachers answered a survey and reported feeling highly satisfied with Respira with an average punctuation of 3,9 over 4,0.

Main Results of the Quantitative Impact Evaluation *

Atention

In the 8 participating schools of 2015 teachers reported significantly increased levels of attention in students from 1st to 3rd grade. In Tumaco and Tambo this same observation was made for higher grades (up to 5th grade).

Stress

The evaluation during the year 2014 showed a significant reduction of perceived stress levels in participating teachers (Bogota and Tumaco), and the process evaluation during 2015 evidenced better stress *management* by the participating teachers.

Depression Symptoms

In the 8 participating schools in Tumaco, Tambo, Cali and Bogota teachers reported a significant reduction of symptoms of depression and anxiety that they perceive in their students of all participating grades.

Anger Regulation

Related to emotional and specifically anger regulation the 2015 evaluation revealed significant positive impacts in students from 1st to 3rd grade in all participating schools, and in Tambo and Tumaco also for students from 4th to 5th grade and teachers.

Reactive Aggression

The most significant impact with participating teachers was evidenced in a reduction of their reactive aggression. The reduction was also significant with students from 1st to 3rd grade. These findings are highly supported by qualitative data.

Attentive Listening

For students from 4th to 5th grade in all regions significantly higher levels of attentive (active) listening were measured. In Bogota and Cali there was also a positive impact in teachers in attentive listening and improved relations among peers.

Empathy

In Bogota and Cali there was a significant increase in empathy levels among students from 1st to 3rd grade, and in Tumaco and Tambo from pre-school to 3rd grade. This variable was not measured in teachers.

OPINIONS FROM TEACHERS, STUDENTS & PARENTS

"Today I am grateful for many things. I am grateful for my students because little by little they taught me to be a more considerate and caring. I was very tough, but they come to school with presents every day: they come with mangoes, with lime, with flowers that they collect on the way to school. I am also grateful for RESPIRA, because it taught me to listen. I am already old with many years of teaching behind me, but only now I realize how important it is to truly listen to others. I feel that this is all I need to get along and feel better with my students, with my family, with everyone."
Teacher, El Tambo (Cauca)

"This year our teacher changed, she explains much better and is more kind. When she comes we now greet her with a hug."
Student, El Tambo (Cauca)

"Some days ago my little brother had a temper tantrum, crying and shouting so strongly that my mother could not control him. She was very stressed and anguished, so I told my brother that he should count his breaths from 1 to 10 together with me, and I showed him. When we finished he calmed down and everything became normal again, my little brother even started playing with his toys smilingly as if nothing had happened. My mum was very surprised and since this day we are breathing together every night."
Student, Tumaco (Nariño)

"The students of my class took the bottle with water and sand home with them. There they keep it and every time their parents are getting angry or fight, they look for it and shake it. Parents told me that they fight less and less, or at least not in front of their children. They say that now they are more aware when they get angry or start a fight."
Teacher, El Tambo (Cauca)

"Yesterday I was waiting for my son all afternoon, but he didn´t come home. Finally at night he arrived, I was very angry. I saw him walking towards our home and started

shouting at him; I was ready to reprimand him strongly. He was walking slowly towards me and when he got closer he hid behind a big poster that he was carrying and said: "Wait mum, breath!" I didn´t know what to do,

honestly it made me laugh. He showed me the poster and explained that I should count 10 breaths in order to calm down. He completely disarmed me!" ***Mother, El Tambo (Cauca)***

"Our teacher improved a lot, now he tries to explain more, he helps us to solve our problems with our classmates. Now he is more organized; classes are cooler now."
Student, El Tambo (Cauca)

"Johan has been one of my great challenges in this class. He is a student with a lot of problems at home and with difficulties in relating to his classmates. He is aggressive, not able to concentrate or even follow the simplest instructions, and the most difficult for me, he rarely speaks. So I was very surprised when for the first time we practiced RESPIRA in class. As soon as we finished the practice of attentive listening (like the bunny in the fairytale), I asked my students about what they had heard. You cannot imagine my joy seeing Johan with his arm raised in the air, wanting to participate. Like any other child he shared his experience. So for me RESPIRA has become a tool to work with him and understand, at least a little bit, what is happening inside his mind."
Teacher, El Tambo (Cauca)

The nationally standardized tests (ICFES) in mathematics are being carried out, and the students run to make it on time. "Teacher, we have thought about you a lot these days! We are presenting the math evaluation and we are breathing a lot! Before starting to answer the exam we breathe and we observe our mind, we wait a little until we are calmer and then we answer. This has helped us a lot to think more clearly and feel better because those exams makes us feel scared!"
5th grade students, Tumaco

"When one of our classmates feels angry, we try to calm him down by reminding him of the image of the water bottle and we say: "Clean your water!" It is very helpful for me to remember the bottle when I feel angry because I remember that I can breathe to clean myself and avoid fighting."
5th grade student, Tumaco

RESPIRA & Peacebuilding: Insights from Theory & Practice

Mindfulness and other contemplative practices have been featured in numerous scientific studies assessing impacts to cognitive and emotional development, psychological well-being and brain structure and function. Evidence to date suggests strong implications for peace, yet such approaches have not been systematically studied through a peacebuilding lens. A recent MA Dissertation explored this topic using RESPIRA as a case study. These are the key findings:

1. Emotional regulation

Emotions are under-emphasized in peace and conflict studies, yet findings from a wide range of research points to the importance of positive emotional states in strengthening interpersonal peace. The fulfillment of emotional needs corresponds with personal growth while unmet needs can lead to frustration and contribute to aggressive tendencies and violent responses. Several studies suggest that difficult emotional states (including fear, grief, rage, guilt, shame, and humiliation) are linked with cyclical and intractable conflict.

Mindfulness promotes emotional wellness and the cultivation of positive emotions and healthy thought patterns, while reducing stress and anxiety. Practicing mindfulness has been shown to reduce expressions of anger and aggression, for example by reducing ruminative (repetitive) thought patterns related to anger. This shows a clear link between mindfulness and peacebuilding.

→ *In RESPIRA, teachers and students learn to recognize and understand turbulent emotional states (through a simple exercise using a water bottle with sand). This promotes internal awareness to identify unwholesome emotional states and shift attention away from them, diminishing their grip and avoiding ruminative tendencies. Teacher participants in Tumaco described the program as contributing towards an ability to control emotions and control violent reactions, while reducing verbal and physical aggression levels among students.*

2. Prosocial competencies

Mindfulness-based interventions in schools are generally associated with the development of positive qualities and prosocial behaviours; they may serve to provide students with a foundation from which to absorb a prosocial value orientation and increase their empathy with others. Especially when combined with social and emotional learning, mindfulness has been shown to support the cultivation of prosocial capacities like active listening, tolerance, or concern for their peers.

→ *RESPIRA aims to develop students' capacities in regulating emotions and behavior, developing harmonious relations with other students, and nurturing positive attitudes toward school and life. Teachers in Tumaco observed improved listening and attention, self-awareness, tolerance and self-esteem among student participants, as well as harmonious relationships, improved classroom dynamics and an atmosphere of greater tolerance and sharing. Greater self-awareness among teachers also nurtured a deeper understanding of student needs, more attentive and compassionate teaching approaches and less aggressive interactions.*

3. Personal peacefulness

Research suggests that people who experience inner peace tend to be more peaceful in their interpersonal relations; and interpersonally peaceful persons tend to have more peaceful attitudes about political affairs. Mindfulness appears to help shape the same qualities that are characteristic of peaceful persons, such as an ability to restrain impulsive action, empathize with others and act in kind ways. Loving-kindness meditation has been demonstrated to improve inter-group bias – key to addressing the divisive notions of "us" versus "them" underlying much of human conflict.

→ *RESPIRA's mindfulness-based approach seeks to nurture inner calm and positive emotions through exercises that promote the recognition and regulation of emotions, as well as experiential tools that teach children about kindness and empathy.*

Short exercises on loving-kindness using child-friendly methodologies encourage students to focus on thoughts of gratitude and well wishes to others. This practice strengthens students' understanding of kindness and empathy and helps facilitate access to these emotional states and capacities.

4. Attachment security

How safe and emotionally secure a person feels in their early relationships and social environments (attachment security) also influences interpersonal peacefulness. Literature points to the potential role of mindfulness in activating or 'priming' positive attachment security with potential links to enhanced compassion and altruistic behavior. Where conflict and trauma are present and disrupt patterns of healthy emotional attachment between caregivers and children, interventions that strengthen positive attachment security are highly relevant for sustainable peacebuilding.

→ *RESPIRA activities with both teachers and students strengthen the fulfillment of psychosocial and emotional needs while activating positive emotional states like kindness and gratitude. This can be understood as a type of 'priming' of attachment security, with a potential to activate compassionate and altruistic tendencies. RESPIRA and similar initiatives may be especially relevant to peacebuilding efforts in conflict-affected contexts since the primed environments introduced contrast the negatevely primed environments that make up teachers' and students' lived realities in conflict zones.*

5. Neuroplasticity

Neuroscientists have studied the brain's ability to change throughout life (neuroplasticity), and research suggests that mental practice can strengthen neural networks to nurture positive habits of mind and peaceful dispositions. Mindfulness practice in particular is a form of mental training that influences short and long-term neural changes that affect the structure and function of the human brain, for example physically increasing grey matter in brain areas that are involved in reasoning or decision-making. It thus affects neural systems in positive ways, decreasing emotional reactivity and improving stress regulation.

→ *RESPIRA teaches about brain regions and functions, while helping participants cultivate a personal mindfulness practice that strengthens brain health. Participants better understand the relationship between stress, emotions and behaviour and how this can be managed to support optimal wellbeing. This has shown particular relevance in Tumaco where participants have applied brain science and mindfulness practice to regulate their emotions and take effective action during situations of intense stress or fear related to the armed conflict.*

6. Psychosocial recovery

Education plays an important role in the relational aspects of post-conflict peacebuilding. Within this process, mindfulness can be viewed as a valuable type of experiential education that goes beyond thought to feelings and engages people's experience, supporting psychosocial recovery and resilience. In situations of crisis, teachers are key to providing a safe and calming space for children with psychosocial trauma. In providing a loving presence and reliable support, they may be the critical factor needed to nurture a child's resilience and ability to function well under difficult circumstances such as armed conflict and highly violent contexts. Yet teachers working in such contexts may also be in need of psychosocial care.

→ *Teachers emphasize how RESPIRA's mindfulness-based approach helps them address fear and maintain calm in violent and insecure contexts associated with the armed conflict. They view the program as filling a critical gap within their teacher education that addresses "the human part" of their work as teachers. The RESPIRA pedagogical model is based on nurturing positive human connections that participants perceive as highly therapeutic. Calming activities in the classroom that work to quiet the mind and promote relaxation create a supportive environment in which teachers have a greater capacity to be present and care for their students facing myriad pressures associated with living in violent or insecure contexts.*

Full paper (accessible on Academia.edu):
Ljubic, I. (2015) Investigating the peacebuilding potential of contemplative approaches in education: Insights from a school-based mindfulness program in Colombia. MA Dissertation, University of Bradford.